

REMARKS

The Applicants do not believe that entry of the foregoing amendment will result in the introduction of new matter into the present application for invention. Therefore, the Applicant, respectfully, requests that the above amendment be entered in and that the claims to the present application, kindly, be reconsidered.

The Final Office Action dated May 19, 2004 has been received and considered by the Applicants. Claims 1-15 are pending in the present application for invention. Claims 1-15 stand rejected by the Final Office Action. The Final Office Action objects to the claims due to incorrect numbering. The foregoing amendment to the claims has corrected this oversight.

The Final Office Action rejects Claims 6 and 10 under the provisions of 35 U.S.C. §101. The Examiner's position is that the subject matter recited by Claims 6 and 10 relates to "a signal for carrying a computer program" and that a signal in itself is not patentable. The Applicants respectfully point out that this rejection is a new rejection that was not necessitated by Applicants' previous amendment, at least regarding Claim 6.

The Examiner made the May 19, 2004 Office Action final. The Applicants, respectfully point out that there was no rejection under 35 U.S.C. §101 in the previous office action. The Examiner may make the present NEW rejection final only if necessitated by an amendment made by the Applicant. The Applicants hereby assert that the finality of the May 19, 2004 Office Action is premature. The MPEP §706.07 details when a Final Rejection is proper on second action.

"Under present practice, second or any subsequent actions on the merits shall be final, except where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c)."

The previous amendment submitted March 23, 2004 by the Applicants amended Claim 6 of the present application for invention to overcome a rejection under 35 U.S.C. §112. Claim 6 prior the March 23, 2004 amendment recited "A signal for carrying a computer program" as does the version of Claim 6 after the March 23, 2004 which is currently subject to this rejection under 35 U.S.C. §101. This rejection states that "a signal for carrying a computer
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program" and a signal in itself are not patentable. There was no change to Claim 6 regarding the recitation of a signal in the amendment submitted March 23, 2004 by the Applicants. Therefore, Claim 6 both before and after the March 23, 2004 amendment submitted by the Applicants defined subject matter for "a signal for carrying a computer program". Accordingly, at least pertaining to Claim 6, the holding of finality is premature.

The Applicant, respectfully, requests that the Primary Examiner reconsider the holding of finality of the May 19, 2004 Office Action and withdraw the finality of the May 19, 2004.

The foregoing amendment to the claims has been made to fully respond to a Final Office Action, which finality is fully anticipated to be withdrawn because it is premature. The Applicant, therefore, reasonably anticipates an opportunity to respond to a non-final office action, which response may include the rescinding of the changes made by the foregoing amendment.

The foregoing should not be construed as an admission that Claims 6 and 10 do not recite statutory subject matter under the provisions of 35 U.S.C. §101. The Examiner states that a signal is unpatentable. The Applicants, respectfully disagree. A signal can be a computer readable medium and should be viewed in an analogous manner to determine if the signal defines patentable subject matter. The signal of Claim 6 is defined for carrying a computer program, which is a series of data structures. The computer program causes a programmable device to carry out steps of base-band demodulation, channel correction and forward error correction of a received digital video signal, which is a tangible result. Initially there is a digital signal that is received and the above discussed steps are performed on the signal resulting in a transformed version of the digitally received signal. Claim 6 further defines subject matter wherein the signal causes a programmable device to perform the above discussed steps, which is equivalent to a program running on a computer in terms of statutory matter. The programmable device is further defined as a cluster of programmable co-processors for performing the foregoing steps of the computer program. Additionally, a general purpose processor is recited that has a shared memory for managing control, synchronization and configuration of the other co-processors. A signal as recited in rejected Claims 6 defines subject matter for a computer program that operates a computational device and this is clearly statutory.

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Rejected Claim 10 additionally defines subject matter wherein the clusters of co-processors are programmable for handling a plurality of data formats, and each respective cluster performs only a single one of the recited three steps. This clearly defines subject matter for a computer program within a computer readable media (a signal) that operates a programmable device to start with a received digital video signal and perform base-band demodulation, channel correction and forward error correction on the received digital video signal, to create a demodulated, channel corrected and error corrected video signal. Further, Claim 10 specifically recites the computer program carried on the signal operates plural cluster in a programmable device to handle each of the base-band demodulation, channel correction and forward error correction on the received digital video signal. Again, this is clearly statutory subject matter. Therefore, this rejection is respectfully traversed.

The Final Office rejects Claims 5 and 9 under the provisions of 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention. The Applicants respectfully point out that this rejection is a new rejection that was not caused by an Amendment made by the Applicant. The previous amendment submitted March 23, 2004 by the Applicants amended Claim 5 of the present application for invention from "a receiver computing" to "a receiver comprising". Claim 5 both before and after the March 23, 2004 amendment recites "A computer program product" both before and after the March 23, 2004 amendment, Claim 5 is dependent upon Claim 4, which is a method claim. Therefore, there is no reason why this rejection could not have been made in the prior non-final office action. Therefore, at least regarding Claim 5, the holding of finality is premature.

The foregoing should not be construed as an admission that Claims 5 and 9 are indefinite under the provisions of 35 U.S.C. §112, second paragraph. Claim 5 recites "A computer program product for a receiver comprising a set of instructions which, when loaded into the receiver, causes the receiver to carry out the method as claimed in Claim 4." Claim 4 recites a method of channel decoding. The Applicants, respectfully, assert that subject matter of a computer program product for a receiver that is defined as a set of instructions that causes a method of channel decoding particularly points out and distinctly claims the computer program product for a receiver. Accordingly, this rejection is respectfully traversed.

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Claims 1, 3, 4, 7-8, 10-13 and 15 are rejected under the provisions of 35 U.S.C. §103(a) as being obvious over EP-0966157 (Uchida) in view of U. S. Patent 6, 240,146 (Stott et al.) and further in view of U. S. Patent 5,685,005 (Garde et al.). The Applicants, respectfully, point out that Uchida does not disclose, or suggest that separate processors perform these functions as recited by the rejected claims, accordingly, there exist elements within the rejected claims that are not found in the combination made by the Final Office Action. The front end as defined by Uchida essentially places a signal into a form that can be processed by a general-purpose processor (see col. 3, line 42-col. 4, line 6). The front end of Uchida is little more than a connector that converts signals in to a digital format. Moreover, the front end of Uchida is not a processor and the front end of Uchida is not programmable.

The Applicants respectfully point out that the rejected claims recite multiple processors executing the functions of a digital front-end block (DFE), a channel correction block (CHN) and a forward error correction block (FEC). This is not disclosed or suggested by Uchida.

The Examiner states that Stott et al. disclose channel correction. The Applicants would like to, respectfully, point out that Stott et al. do not disclose, or suggest, multiple processors executing the functions of a digital front-end block (DFE), a channel correction block (CHN) and a forward error correction block (FEC). Furthermore, Stott et al. do not disclose, or suggest, multiple processors. The Examiner has not indicated any portion of Stott et al. that teach a programmable device. The rejected claims to the present invention also recite clusters of co-processors. The front end of Uchida does not disclose multiple processors that are capable of performing any of the aforesaid functions. The Applicants, respectfully, point out that Uchida and Stott et al., alone or in combination, do not teach multiple processors executing the functions of a digital front-end block (DFE), a channel correction block (CHN) and a forward error correction block (FEC).

The Examiner cites Garde et al. for the recited features of shared memory with the recited general-purpose processor. The rejected claims to the present invention also recite clusters of co-processors executing the functions of a digital front-end block (DFE), a channel correction block (CHN) and a forward error correction block (FEC). Garde et al. does not disclose or suggest these features. As previously discussed, Uchida and Stott et al. do not

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disclose, or suggest, these features. Accordingly, Applicants respectfully submit that the Examiner has failed to make a *prima facie* case of obviousness. Therefore, this rejection is respectfully traversed.

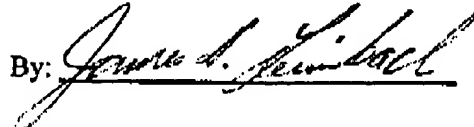
Regarding Claim 2, rejected under the provisions of 35 U.S.C. §103(a) as being obvious over Uchida in view of Stott et al. and further in view of Garde et al and U. S. Patent 5,453,797 (Nicholas et al.). The Applicants respectfully submit that the Examiner has used Applicants' claims as a blueprint for recreating the recited invention using hindsight reconstruction of the invention by picking unrelated pieces out of the references, without finding any motivation in the references themselves for making such combinations. The motivation instead comes from Applicants' disclosure and Applicants' claims.

Furthermore, the Applicants point out that the Examiner has failed to indicate where within the cited prior art references the subject matter that could reasonably be equated to the co-processors recited by rejected Claim 2 exists. Accordingly, the Applicants, respectfully, submit that the Examiner has failed to make a *prima facie* case of obviousness against Claim 2.

Regarding Claims 5, 9 and 14 rejected under the provisions of 35 U.S.C. §103(a) as being obvious over Uchida in view of Stott et al. and further in view of Garde et al and U. S. Patent 6,478,222 (Sarfati). The Applicants respectfully submit that the Examiner is using the Applicants' disclosure as a blueprint in an improper hindsight reconstruction of the invention by picking unrelated pieces out of the references without providing any motivation in the references themselves for making the combinations made by the Final Office Action. The only motivation is from Applicants' disclosure and the rejected claims to the present invention. Furthermore, Claims 5, 9 and 14 depend from claim, which as previously discussed, are believed to be allowable. Therefore, Claims 5, 9 and 14 are also believed to be allowable.

In view of the foregoing amendment and remarks, the Applicants believe that the present application is in condition for allowance, with such allowance being, respectfully, requested.

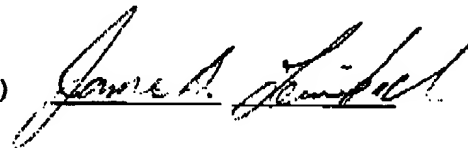
Respectfully submitted,

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